PBET Workshop Description

It is Unique!

- It is focused solely on **_performance-based_** training. There are other training traditions and theories- we don't get into them. Performance-based training works best for equipment training and it is the guideline for training in the semiconductor, flat panel, and solar industries. (See SEMI Standard E-150.)
- It is focused solely on performance-based **_equipment_** training. We do not digress into improving sales training, management training, or other HR training. Although performance-based training is applicable to many types of jobs, and would be helpful to those teaching generic technical skills, this Workshop is about training trainers to create and deliver training for operating, maintaining, installing, troubleshooting, programming, and applying processes for manufacturing, industrial, medical, and similar *high tech equipment.*

A Workshop Where...

…You don't just hear what to do

…You don't just see what to do

…You actually *practice* every instructor and development skill!

Expected Outcomes. After the Workshop, will be able to

- Determine the degree to which a course is or is not performance-based.
- Develop performance-based training.
- Deliver performance-based training.

Objectives. Participants are "signed-off" as they demonstrate their success with the Workshop objectives. "Sign-off" on at least 18 objectives (of the 23 possible lessons) is required for certification. Generally, there is only time for most participants to complete 18-20 lessons. Lessons are selected based upon the needs of the attendees.

Core Tasks	Delivery Tasks	Developer Tasks
• Recognize the PBET Process • Identify PBET Characteristics • List PBET Steps • Make a List of Tasks • Perform Task Analysis • Plan Job Aids • Identify Parts of Objectives • Edit Objectives with Common Problems • Write Objectives • Interpret Learning Hierarchies	• Select Appropriate Delivery Strategies • Apply Positive Trainer Characteristics • Pilot a PBET Lesson Plan • Describe Evaluation Levels	• Do a Performance Analysis • Use a Learning Hierarchy to Support Design • Develop a Learning Hierarchy • Design a Lesson's Performance Test • Select a Lesson's Relevant Content • Select a Content Delivery Method • Design a Lesson Introduction • Design Your Own Lesson • Develop Miscellaneous Course Materials

Workshop Can be Customized.

- The standard Workshop provides the skills necessary for implementing performance-based training in the semiconductor equipment environment. (However the Workshop can be customized for other the medical, robotics, or other high tech environments.)
- The Workshop provides practice in trainer strategies for delivering performance-based training. It

does not provide practice in "presentation skills," although the Workshop can be customized to include such practice if desired.)

Workshop Activities
- The activities begin before the Workshop with several lessons to be completed prior to coming to the Workshop.
- About 80% of the Workshop activities are instructor led and 20% of the activities are individual self-study activities.
- The instructor led portion of the Workshop includes: group discussions, lectures, and practice activities. Examples of practice activities includes: a) drafting a procedure while observing a technical expert; b) planning and creating two job aids; and c) planning and conducting a new lesson pilot.
- The self-study activities include: Creating a task list, and preparing lesson plans.

Take-Aways. Here are some of the things you bring home for later use:
- A 500 page reference manual that has been updated from 1995 through 2013.
- A job aid to help you assess and organize information collected during a task analysis.
- A job aid to help you write your own performance based lesson plans.
- Two lesson plans you write during the Workshop on a task of your own choosing.
- Sample Evaluation instruments that you can adapt to your own situation.

Who Should Attend the PBET Workshop.
- From Equipment Suppliers:
  - Trainers / Trainer-Developers
  - Customer Service or Training Managers
  - Technical Writers
  - Field Service or other Engineers who will be conducting training
  - Engineers / Technicians who will be reviewing technical content for training
- From Device and Electronics Manufacturers:
  - Trainers / Trainer-Developers
  - Lead Operators and other technicians responsible for training their peers
  - Equipment Engineers that will be training or supporting training

Prerequisites. Those who attend the Workshop will be more likely to have success if they can already:
- Operate one or more machines (or perform routine maintenance) associated with your high tech equipment business.
- Write complete sentences in English.
- Understand spoken English.

On Site Workshops: The Workshop can be delivered onsite for your staff only. Benefits include:
- Save money. You eliminate the cost of travel for all your participants.

- Gain common language. Everyone in your organization will be approaching training in the same way, using the same language and strategies.

- Get a jump-start. With planning, as many as 20 different lesson plans can be created for one of your new products by the time your Workshop is finished. Best of all, everyone in your group will be ready to roll at the same time.

- The program can be customized to specific needs of your staff. Also, a single visit can combine a Workshop with kick-start consulting to assist those that are starting a new course development project.

- When a significant proportion of your staff is PBET certified, you may display a unique seal on your company's web page (at right).

You will need to consider these requirements—
- Classroom. Host company must provide a room that is not less than 600 sq. ft. (56 sq. meters). It must have movable chairs and tables. (A conference room with one large board-room table will not work.) Typically two students will sit together at each table. Tables should be free of equipment assemblies and computer work stations.

- Equipment. Host company must provide:
  - Computer projection system to work with our laptop computer.
  - Easel. (We bring the paper pad and markers.)

- Refreshments/Lunch.   Lunch breaks during the Workshop are for 60 minutes. If a company cafeteria or nearby fast food restaurant is not close to the company's location, a simple catered lunch should be supplied. Host company might choose to supply morning and afternoon refreshments.

For current costs, request an "initial quote." An initial quote includes an estimate of travel expenses if the specific date for the Workshop has not been discussed. Once you provide the firm date for your Workshop, we can provide a final quote for the Workshop. Get general pricing information from this link: http://www.mr-pbet.com/Onsite-PBET-Workshops.htm#Costs

Workshop Leader: Richard Goutal

Richard "Dick" Goutal was the Training Manager for a large semiconductor equipment supplier until he established Solid Performance Solutions in 1992. Since that time he has worked with many businesses in the semiconductor world, helping them to implement the principles of performance-based equipment training. Richard personally conducts every PBET Workshop. Occasionally, he has provided Workshops for other industries, for example, the medical equipment and robotics industries.

Dick has regularly updated the Workshop materials with relevant examples and current references. He has conducted the Workshop in 16 countries and, by 2015, he had "PBET-ized" (certified) nearly 1750 technicians, trainers, service engineers, and technical writers that work in high tech industry, principally in the semiconductor equipment industry.

In addition Dick has consulted with equipment suppliers, assisting them with PBET implementation. Examples include:
- facilitating the training team in kicking off the development of new product training, including
  - ensuring the correct tasks are taught.
  - ensuring the documentation for training is on target.
  - ensuring that the course sequencing is correct.
- facilitating the training team in kicking off a field service training program.
- conducting training audits and providing feedback on next steps for improvement.
- mentoring a designated PBET internal trainer.
- creating and delivering related customized training such as "How to Write Written Procedures."

How was PBET Introduced into the Semiconductor Industry?

Some semiconductor equipment suppliers and some fabs had been adhering to some or all of the PBET steps and characteristics prior to 1992.

In 1992, the first conference of the Technician Performance Improvement Council(TPIC) was held. (It was originally sponsored jointly by SEMATECH and SEMI-SEMATECH and then known as the

Technician Training Council, TTC.) Hundreds of representatives from many chip manufacturers and equipment suppliers met annually to learn from one another and to establish guidelines.

The Council's first three task forces were established in 1992 to develop industry guidelines for these areas: reference manuals, training programs, and evaluation of training programs.

All three task forces recognized the difficulty of proceeding without basic principles to serve as a common plumbline. It was suggested that good training would be recognized if certain characteristics were present. The original list of "characteristics of good training" became what we now call "PBET Characteristics." These characteristics were mainly drawn from the writings of Robert Mager, a world-wide leader in the performance and training profession.

All of this was further standardized in the semiconductor industry when SEMI made PBET an official "Guideline" for training in 2007. Learn more about that here: http://www.Mr-PBET.com/Standard.htm

Who Came Up with the Name "PBET"?

Julian Serda received wide recognition for his work in developing performance-based training programs while working as Training Manager at Signetics during the early 1980s. Later, as an independent consultant, he assisted several semiconductor suppliers in the development of performance-based training for their front end tools.

By 1994, Julian was working in the training group at SEMATECH. He saw that TPIC had made the six PBET characteristics a guideline but he knew that the industry would need help with implementation of the guideline. During 1994-1995, Julian developed the Workshop that he called the "Performance-Based Equipment Training" Workshop. So, "PBET" was born.

Since then, Julian has continued to provide training and other performance-improvement solutions while at AMD, Spansion, and most recently at GlobalFoundries.

Do Other Industries Use PBET?

Yes, but while performance-based training is practiced in other industries, the PBET acronym is known primarily in the semiconductor industry (see above).

We can customize the PBET Workshop for your industry requirements if you are not associated with the semiconductor industry.

The military has used a form of performance-based training for many years.

Performance-based training may also be referred to as criterion-referenced instruction, accomplishment-based training, competency-based training, and other names.

Performance-based training is part of the larger field of performance improvement, sometimes called human performance technology (HPT).

Refer to the International Society for Performance Improvement (ISPI) for more information on the larger application of performance-based solutions in many industries

More Questions:

What is PBET? Please see http://www.Mr-PBET.com/PBET-Explained.htm for resources.

Have any free resources for trainers? Please see: http://www.Mr-PBET.com/Training-Resources.htm